

REMARKS/ARGUMENTS

The Office Action has been carefully considered. It is respectfully submitted that the issues raised are traversed, being hereinafter addressed with reference to the relevant headings appearing in the Detailed Action section of the Office Action.

Claim Rejections – 35 USC § 102

The Examiner rejects claims 1, 3 - 5, 7 and 12 under 35 U.S.C. §102(b) as being anticipated by Hackleman *et al.* (US 5,719,602).

A claim is anticipated if all of its limitations are present in a single reference in the prior art. Because all of the limitations of the claims of the present invention are not present in Hackleman *et al.* as discussed below, the present invention is not anticipated by Hackleman *et al.* and the rejection is traversed. Reconsideration and withdrawal of the rejection is respectfully requested.

Hackleman *et al.* discloses a page-wide-array which seeks to more efficiently print on a media sheet without having to wait for the media sheet to speed up to a constant velocity (col 7, lines 56 - 58). Firing of print-head nozzles is controlled as a function of media speed (col 2, lines 28 - 29). Nozzle timing is adjusted during acceleration to achieve accurate dot placement on the media sheet (col 2, lines 33 - 35).

The present invention is not concerned with dot data timing as a function of velocity or acceleration of the media sheet.

Referring to present claim 1 the relative skew between adjacent rows of printing nozzles is in a direction normal to a direction of printing and it is this relative skew between adjacent rows of printing nozzles that is at least partially compensated for, as defined in claim 1.

Hackleman *et al.* does not disclose or suggest supplying dot data to compensate for a relative skew between adjacent rows of printing nozzles in a direction normal to a direction of printing. Although Hackleman *et al.* illustrates offset printhead nozzles 44 in Fig. 2, Hackleman *et al.* is silent on ordering and timing the supply of the dot data to printhead nozzles 44 as a result of the offset illustrated in Fig. 2.

In Hackleman *et al.*, nozzle timing is adjusted as a function of media speed, thus it follows that nozzle timing is a function of the offset between rows of printhead nozzles 44 in a direction parallel to the direction of printing. This is an important and significant difference between the invention defined in claim 1 of the present application.

This is further illustrated in that dot data from printbar memory 70 is output to the flex circuit 16 and nozzle groups 26 to activate nozzles 44 (col 5, lines 63 - 65). Nozzle groups 26 include lines of offset nozzles 44 thereby further indicating that Hackleman *et al.* does not utilise or contemplate timing dot data as a result of a skew between adjacent rows of printing nozzles. Again, Hackleman *et al.* utilises a velocity sensor 80 to define a rated timing as a function of the velocity of a media sheet relative to printer element 10 for determining the timing of firing nozzles 44. This is markedly distinct to the present invention which is directed to controlling the order and time of supply of dot data based on a

relative skew between adjacent rows of printing nozzles in a direction normal to a direction of printing.

Hence, present claims 1, 3 - 5, 7 and 12 are submitted not to be anticipated by Hackleman *et al.*.

Claim Rejections – 35 USC § 103

The Examiner rejects all other dependant claims 2, 6, 8 - 11 and 13 - 18 under 35 USC 103(a) as being unpatentable over Hackleman *et al.* in view of Dings *et al.* (US 2003/0218645), Walmsley (US 6,805,419), Silverbrook (US 2003/0103106), Usui *et al.* (US 6,874,863), King *et al.* (US 6,604,808), Kamoshida *et al.* (US 2002/0075339), Morita *et al.* (US 5,774,145) in respect of the various dependent claims.

Obviousness can only be established if the prior art references when combined teach or suggest all the claim limitations. None of the cited documents teach or suggest a printer controller configured to order and time the supply of dot data such that a relative skew between adjacent rows of printing nozzles, in a direction normal to a direction of printing, is at least partially compensated for.

As previously discussed, Hackleman *et al.* does not disclose or suggest this feature. Likewise, this feature of present claim 1 is not found in any of the other cited documents.

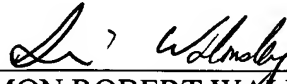
Reconsideration and withdrawal of this rejection is respectfully requested in light of the foregoing arguments.

CONCLUSION

In view of the foregoing, it is respectfully requested that the Examiner reconsider and withdraw the rejections. The present application is believed to be in condition for allowance. Accordingly, the Applicant respectfully requests a Notice of Allowance of all the claims presently under examination.

Very respectfully,

Applicant:


SIMON ROBERT WALMSLEY


RICHARD THOMAS PLUNKETT

C/o: Silverbrook Research Pty Ltd
393 Darling Street
Balmain NSW 2041, Australia

Email: kia.silverbrook@silverbrookresearch.com
Telephone: +612 9818 6633
Facsimile: +61 2 9555 7762